Supplementary Table 1 Sequence and mass spectrum analysis results of peptides from *Engraulis japonicus*

peptide composition	Molecular weight	Ionic strength	Percent content（%）
MLVGL	401.27	4.50×10^{8}	17.99%
MAEAL	403.22	3.13×10^{8}	12.50%
MISAL	403.25	5.86×10^{8}	23.41%
MSDAL	405.20	2.75×10^{8}	10.99%
AGGPI	414.23	7.45×10^{8}	29.79%
IGGGI	416.25	2.71×10^{8}	10.84%
MGDAI	417.20	1.73×10^{8}	6.93%
MLDGI	417.23	7.15×10^{8}	28.55%
MSEAI	419.21	4.15×10^{8}	16.60%
MLALI	429.31	1.18×10^{8}	4.73%
VGASP	430.23	7.86×107	3.14%
MVALQ	430.26	4.81×10^{8}	19.23%
MLGLK	430.30	1.17×10^{8}	4.69%
GGDAL	432.21	1.35×10^{8}	5.39%
MTALQ	432.24	1.62×10^{8}	6.48%
MEDGL	433.19	2.37×10^{8}	9.46%
MVDLS	433.23	2.96×10^{8}	11.84%
MVALM	433.24	1.27×10^{8}	5.09%
MTVTI	433.26	1.88×10^{8}	7.50%
MTDAE	435.17	4.02×10^{7}	1.60%
MEGSF	439.18	1.53×10^{8}	6.10%
MVIVN	444.28	1.77×10^{8}	7.09%
MLEAI	445.26	1.16×10^{9}	46.34%
MVLTL	445.30	2.78×10^{8}	11.11%
EGAGI	446.22	1.47×10^{8}	5.87%
VVAAS	446.26	2.33×10^{8}	9.31%
MSLGE	447.21	3.08×10^{8}	12.31%
MTALT	447.24	5.80×10^{8}	23.19%
MATPY	451.22	2.81×10^{8}	11.22%
LGVAP	456.28	3.90×10^{8}	15.57%
IVLGG	458.30	1.83×10^{8}	7.33%
MLVDL	459.28	4.72×10^{8}	18.87%
MVGGDL	460.24	2.3×10^{8}	9.53%

MKAEI	460.27	2.87×10^{8}	11.46%
EGGGAA	461.20	2.39×10^{7}	0.95%
MDVDL	461.22	5.05×10^{8}	20.18%
MLSLE	461.26	4.72×10^{8}	18.86%
MTTLE	463.24	6.84×10^{7}	2.73%
LGGGY	466.23	5.48×10^{7}	2.19%
MKLPL	470.33	4.46×10^{7}	1.78%
IGGPK	471.29	1.80×10^{8}	7.21%
LVLAG	472.31	1.48×10^{8}	5.89%
MLIVE	473.30	2.81×10^{8}	11.22%
MLDLN	474.25	6.71×10^{8}	26.82%
GIDGI	474.25	6.68×10^{8}	26.69%
ILTGA	474.29	2.05×10^{8}	8.21%
MEVVE	475.24	1.09×10^{9}	43.52%
MITEL	475.27	1.74×10^{8}	6.96%
IDGAT	476.23	1.29×10^{8}	5.16%
VGGVF	478.26	1.08×10^{8}	4.33%
LSPPA	484.27	1.89×10^{8}	7.53%
LALPA	484.31	8.81×10^{7}	3.52%
VPGVD	486.25	1.62×10^{8}	6.46%
MLEIL	487.31	1.42×10^{8}	5.67%
ELGGL	488.27	4.71×10^{8}	18.84%
MLDEL	489.25	2.71×10^{8}	10.84%
TEAGI	490.25	2.04×10^{8}	8.15%
MMDAL	491.22	4.18×10^{7}	1.67%
MEITE	491.23	9.39×10^{7}	3.75%
MQVDM	492.21	5.50×10^{7}	2.20%
VGGPY	492.24	1.70×10^{8}	6.80%
TGAIM	492.25	1.75×10^{8}	6.98%
EAFGA	494.22	1.03×10^{8}	4.12%
MAPAAPA	497.27	7.80×10^{7}	3.12%
AAALGP	499.29	7.20×10^{7}	2.88%
PAAIE	500.27	1.10×10^{8}	4.38%
LVVGL	500.34	1.65×10^{7}	0.66%
SGPLGA	501.27	7.31×10^{7}	2.92%
VAALGA	501.30	4.40×10^{7}	1.76%
AVTPD	502.25	6.61×10^{7}	2.64%
MELIQ	502.29	2.52×10^{8}	10.06%

MTIVIG	502.32	2.13×10^{8}	8.53%
MSIEI	503.27	2.62×10^{8}	10.46%
EVEGA	504.23	1.48×10^{8}	5.91%
MSLGVE	504.26	1.24×10^{8}	4.95%
MEVEE	505.21	1.86×10^{8}	7.41%
PASTM	506.23	3.71×10^{8}	14.82%
IEDM	507.21	1.63×10^{8}	6.53%
LGGDF	508.24	1.13×10^{8}	4.53%
ALPHA	508.29	1.89×10^{8}	7.54%
AADSF	510.22	9.04×10^{7}	3.61%
MSASVF	510.25	7.53×10^{7}	3.01%
MSEYL	511.24	1.45×10^{8}	5.79%
VAGVPA	513.30	7.59×10^{7}	3.03%
KGVPI	513.34	4.86×10^{7}	1.94%
MEVPGL	514.29	1.02×10^{8}	4.07%
VAVVE	516.30	1.35×10^{8}	5.40%
IESGL	518.28	1.49×10^{8}	5.95%
MEIEE	519.23	2.98×10^{8}	11.91%
EVDGT	520.22	5.26×10^{7}	2.10%
IEEM	521.23	5.62×10^{7}	2.24%
DIAGF	522.25	1.07×10^{8}	4.26%
VIGAY	522.29	9.52×10^{7}	3.81%
LDFE	523.24	1.03×10^{8}	4.11%
IAPEP	526.29	8.64×10^{7}	3.45%
LAPPE	526.29	1.27×10^{7}	0.51%
LAPEP	526.29	8.61×10^{7}	3.44%
LLPAL	526.36	3.27×10^{7}	1.31%
LGGLAP	527.32	1.36×10^{8}	5.43%
VAIPE	528.30	2.39×10^{8}	9.55%
MKVAVI	529.37	3.06×10^{7}	1.22%
NAVGGL	530.29	2.81×10^{7}	1.12%
VDGAAV	531.27	1.27×10^{8}	5.06%
LDAGR	531.29	6.62×10^{7}	2.65%
IGDDL	532.26	1.11×10^{8}	4.42%
MDALTI	532.30	1.47×10^{8}	5.88%
TLGNE	533.25	4.98×10^{7}	1.99%
TGDIE	534.24	9.58×10^{7}	3.83%
SADML	536.24	4.66×10^{7}	1.86%

FDAGAG	537.23	2.40×10^{7}	0.96%
YGGEI	538.25	1.10×10^{8}	4.41%
SYVGD	540.23	4.00×10^{7}	1.60%
EILAP	542.32	5.80×10^{7}	2.32%
DIAPK	543.31	5.77×10^{7}	2.31%
VGVVVA	543.35	4.46×10^{7}	1.78%
PIISD	544.30	1.07×10^{8}	4.28%
VSLPE	544.30	8.28×10^{7}	3.31%
IADIL	544.33	1.61×10^{8}	6.43%
VDVGGV	545.29	1.02×10^{8}	4.06%
GDLKL	545.33	6.81×10^{7}	2.72%
ALDDI	546.27	1.32×10^{8}	5.26%
GDLGGE	547.23	7.55×10^{7}	3.02%
ESAIQ	547.27	7.33×10^{7}	2.93%
ELGTE	548.25	1.05×10^{8}	4.18%
FDNVG	551.24	1.23×10^{7}	0.49%
MEFEE	553.21	4.25×10^{7}	1.70%
VGGLPN	556.31	3.84×10^{7}	1.54%
IAEPE	558.27	3.73×10^{7}	1.49%
VVDLL	558.35	5.10×10^{7}	2.04%
QDIIA	559.31	1.57×10^{8}	6.28%
IGGSIL	559.34	6.35×10^{7}	2.54%
DAVAGK	560.30	5.10×10^{8}	20.38%
MDSLVQ	561.29	1.21×10^{8}	4.84%
SVDLGA	561.29	1.19×10^{8}	4.77%
LGDEE	562.23	3.46×10^{7}	1.38%
DNGSGL	562.24	4.88×10^{7}	1.95%
FGQPN	562.26	4.14×10^{7}	1.66%
MSGDDGI	563.23	6.07×10^{7}	2.43%
VGNEF	565.26	6.68×10^{7}	2.67%
VSGGVF	565.30	4.75×10^{7}	1.90%
SVGGVF	565.30	$4.76^{\times107}$	1.90%
DLDGF	566.24	6.63×10^{7}	2.65%
LLPVGA	569.36	4.30×10^{7}	1.72%
VNLPGA	570.32	3.20×10^{7}	1.28%
VILPE	570.35	6.53×10^{7}	2.61%
VGGEPL	571.31	8.28×10^{7}	3.31%
DDPLL	572.29	9.58×10^{7}	3.83%

DLVGGL	573.32	1.28×10^{8}	5.11%
DITGGI	575.30	9.89×10^{7}	3.95%
EELGE	576.25	7.67×10^{7}	3.06%
TLDDL	576.29	8.51×10^{7}	3.40%
VLDTM	578.28	1.65×10^{8}	6.58%
EGPMF	580.24	1.60×10^{7}	0.64%
VGGGEY	581.25	4.33×10^{7}	1.73%
YVGDE	582.24	3.72×10^{7}	1.49%
PGPSPK	582.32	3.65×10^{7}	1.46%
EAPGPI	583.31	1.51×10^{8}	6.04%
NIPLE	585.32	2.11×10^{8}	8.41%
IVEPE	586.31	1.43×10^{8}	5.72%
INPDE	587.27	6.63×10^{7}	2.65%
EVDDL	590.26	2.35×10^{8}	9.39%
EDQSI	591.26	6.85×10^{7}	2.74%
LFGAPS	591.31	3.59×10^{7}	1.44%
TDFIP	592.30	7.17×10^{7}	2.86%
EHPVL	594.32	2.53×10^{7}	1.01%
PSTSGF	595.27	4.86×10^{7}	1.94%
EHPTL	596.30	2.10×10^{7}	0.84%
PVGVGPA	596.34	1.35×10^{7}	0.54%
FDGGSD	597.21	5.68×10^{7}	2.27%
DFDSD	598.20	9.51×10^{6}	0.38%
DFETS	598.23	1.36×10^{7}	0.54%
VPGVID	599.34	7.16×10^{7}	2.86%
LEKPLG	599.37	3.18×10^{7}	1.27%
SPADVL	601.32	6.94×10^{7}	2.77%
DGVVLV	601.35	3.69×10^{7}	1.47%
RVVDL	601.36	2.66×10^{7}	1.06%
IIDQGG	602.31	6.32×10^{7}	2.53%
DDIIQ	603.30	1.03×10^{8}	4.12%
LDDLE	604.28	4.52×10^{7}	1.81%
ESGLAGA	604.29	2.32×10^{7}	0.93%
SGLDVD	605.28	5.53×10^{7}	2.21%
VNPLY	605.33	1.39×10^{8}	5.57%
EFGASP	607.27	3.83×10^{7}	1.53%
DFNSM	613.23	1.03×10^{7}	0.41%
GNPTVE	616.29	2.24×10^{7}	0.90%

GVAPVSS	616.33	4.09×10^{7}	1.63%
LEIEL	616.35	2.82×10^{7}	1.13%
VVGDDL	617.31	1.28×10^{8}	5.10%
GPYGPQ	618.29	1.49×10^{7}	0.60%
LVEEE	618.30	4.24×10^{7}	1.69%
GSVDLQ	618.31	6.00×10^{7}	2.40%
MDALK	619.31	8.72×10^{7}	3.48%
VYEPL	620.33	7.24×10^{7}	2.89%
PFDQD	621.25	2.89×10^{7}	1.16%
KDFVL	621.36	4.44×10^{7}	1.77%
DLTDY	626.26	7.40×10^{7}	2.96%
EAPAAPA	626.31	1.76×10^{8}	7.04%
PAAEAAP	626.31	6.87×10^{7}	2.75%
LQLPR	626.40	1.21×10^{7}	0.48%
GAPGTPQ	627.31	4.41×10^{7}	1.76%
QGLSPQ	629.32	2.17×10^{7}	0.87%
TEPVIA	629.35	2.35×10^{7}	0.94%
ISPSVE	631.33	4.43×10^{7}	1.77%
WDVTD	635.26	2.54×10^{7}	1.01%
KIEDM	635.30	5.96×10^{7}	2.38%
GLDGLY	637.32	4.80×10^{7}	1.92%
FGTGEE	639.26	1.68×10^{7}	0.67%
ILAPEP	639.37	1.54×10^{8}	6.15%
IIAPPE	639.37	1.48×10^{8}	5.91%
VNLPGAA	641.36	2.32×10^{7}	0.93%
ALPVIE	641.38	4.62×10^{7}	1.85%
IVAPGKG	641.40	4.54×10^{7}	1.81%
EPDVLA	643.33	4.92×10^{7}	1.96%
GLLNVE	644.36	3.52×10^{7}	1.41%
EGLTVK	646.37	1.92×10^{7}	0.77%
MEELEE	648.27	1.13×10^{8}	4.52%
EANFPA	648.29	4.70×10^{7}	1.88%
KYPLE	649.35	1.07×10^{8}	4.27%
QEPMF	651.28	2.75×10^{7}	1.10%
FDENE	653.24	3.80×10^{7}	1.52%
LSGLPLG	656.40	2.54×10^{7}	1.01%
SLPQVN	657.35	2.37×10^{7}	0.95%
LPIDIS	657.38	6.74×10^{7}	2.69%

PIDILS	657.38	6.80×10^{7}	2.72%
ELPDGQ	658.30	1.55×10^{8}	6.20%
LDSVAGV	660.35	2.78×10^{7}	1.11%
ADVEDL	661.30	5.18×10^{7}	2.07%
LEAPPH	663.34	4.94×10^{7}	1.97%
TNGDEE	664.24	1.37×10^{7}	0.55%
SEGETF	669.27	3.29×10^{7}	1.32%
LQGEVE	674.33	2.60×10^{7}	1.04%
LEGDLK	674.37	4.88×10^{7}	1.95%
WDNDM	680.23	2.07×10^{7}	0.83%
HESPVL	681.35	3.56×10^{7}	1.42%
RVPTNP	683.38	4.02×10^{7}	1.60%
DVEVVQ	688.35	9.14×10^{7}	3.65%
GGGSGGGGAGG	690.28	1.77×10^{7}	0.71%
ELDGGAE	690.29	2.19×10^{7}	0.87%
LDADGAE	690.29	2.18×10^{7}	0.87%
WDDME	695.23	1.36×10^{7}	0.54%
IDFGMD	697.28	9.91×10^{6}	0.40%
PGLPEAN	697.35	3.27×10^{7}	1.31%
LILLLL	697.52	1.30×10^{7}	0.52%
PAEEVR	700.36	1.22×10^{7}	0.49%
VDLPGLS	700.38	4.45×10^{7}	1.78%
VSGAELE	704.34	4.44×10^{7}	1.77%
SKQDVE	705.34	2.46×10^{7}	0.98%
LVLPVAP	708.46	1.91×10^{7}	0.76%
LGELTSP	716.38	3.72×10^{7}	1.49%
LGETLPS	716.38	3.64×10^{7}	1.45%
DLKDDI	718.36	6.13×10^{7}	2.45%
KDIDDL	718.36	3.92×10^{7}	1.57%
DIDDLE	719.31	2.63×10^{7}	1.05%
SAGDGSIL	719.35	1.80×10^{7}	0.72%
VNPVYE	720.35	2.97×10^{7}	1.19%
VGGVPYE	720.35	3.00×10^{7}	1.20%
EYPDLS	723.32	1.05×10^{7}	0.42%
NVPLYE	734.37	1.50×10^{8}	5.99%
QESPMF	738.31	8.78×10^{6}	0.35%
DLTDYL	739.35	1.08×10^{7}	0.43%
PEDVLGL	742.39	2.01×10^{7}	0.80%

EPAVDLT	744.37	2.99×10^{7}	1.19%
PTPPNKP	750.41	1.01×10^{7}	0.40%
DKPVSIP	755.43	1.88×10^{7}	0.75%
SEALDLL	760.41	1.93×10^{7}	0.77%
IDVDVSN	761.36	1.07×10^{7}	0.43%
DESLLGK	761.40	1.18×10^{7}	0.47%
LKYPIE	762.44	1.04×10^{7}	0.42%
EAPLNPK	768.42	2.47×10^{7}	0.99%
LPDLISD	772.41	1.77×10^{7}	0.71%
TEDQVVS	777.36	4.41×10^{7}	1.76%
DWTLNM	779.34	1.03×10^{7}	0.41%
GEQIDNL	788.38	4.00×10^{7}	1.60%
TVDDVIQ	789.40	1.51×10^{7}	0.60%
NWDDME	809.27	1.82×10^{7}	0.73%
PGDIVIID	841.46	1.50×10^{7}	0.60%
EAPGPINF	844.42	3.34×10^{7}	1.34%
SVIMGMSH	861.40	1.30×10^{7}	0.52%
TEAPLNPK	869.47	2.86×10^{7}	1.14%
PDGQEVLL	870.45	5.53×10^{7}	2.21%
IDGDEVLN	874.41	2.68×10^{7}	1.07%
IANDMLVD	890.42	1.64×10^{7}	0.66%
LVPIVEPE	895.51	5.40×10^{7}	2.16%
IVPIVEPE	895.51	5.40×10^{7}	2.16%
LGEQIDNL	901.46	8.89×10^{6}	0.36%
PASLPDCF	906.40	2.42×10^{7}	0.97%
ENAPSFLE	906.42	9.61×10^{6}	0.38%
GVDNPGHPF	939.43	1.05×10^{7}	0.42%
ELPDGQVIT	971.50	2.03×10^{7}	0.81%
DLPDLQDVA	985.48	1.02×10^{7}	0.41%
EEDHLRVI	1010.52	9.96×10^{6}	0.40%
TGVDNPGHPF	1040.47	1.11×10^{7}	0.44%
SLSGLEGGESI	1048.51	1.54×10^{7}	0.61%
SIEDPFDQD	1065.43	2.85×10^{7}	1.14%
ELPDGQVITI	1084.59	3.46×10^{7}	1.38%
GDSDGDGKIGVD	1134.49	6.32×10^{7}	2.53%
AGDDAPRAVFPS	1202.57	1.15×10^{7}	0.46%
VSVGDKVPADIR	1255.70	1.78×10^{7}	0.71%
KPGMPNVSNDLS	1258.62	8.93×10^{7}	3.57%

IIDQDKSGFIE	1264.64	4.35×10^{5}	0.02%
VVGDDLTVTNPKR	1413.77	2.62×10^{7}	1.05%

Supplementary Table 2 Sequence and mass spectrum analysis results of peptides from *Glycine max*

peptide composition	Molecular weight	Ionic strength	Percent content（%）
SRLRKDPGP	1024.58	15.4	0.17%
DETGFMMGVI	1098.51	28.6	0.32%
LIIWAKNGH	1050.51	36.6	0.41%
TDVPAE	630.36	54.8	0.61%
SRTVVQ	688.26	58.3	0.65%
MGVIR	574.31	61	0.68%
EGKDWEDQLGADIK	1584.73	64.4	0.72%
QPQEQN	742.32	64.4	0.72%
FLMEME	814.45	70	0.78%
FIFMLT	814.41	73.7	0.82%
VVEDLSINIYS	1251.75	76.1	0.85%
VQMVLQ	716.45	77.5	0.86%
ERLSHR	796.45	78.6	0.87%
SIPSRSPL	855.49	84.5	0.94%
TASPVLPAR	910.48	100	1.11%
GADVVRYTF	1026.50	108	1.21%
SQRPQ	614.32	110	1.22%
VHSM	472.25	111	1.24%
GFGGMPLNLLGLGAGTV	1572.82	157	1.75%
EEKLEQ	774.44	199	2.22%
ILIIILILLLIGG	1375.03	231	2.57%
SVPFSPNNPT	1058.61	238	2.64%
GANTSNSAGRLAIN	1344.73	243	2.70%
LHKTMQ	756.35	286	3.19%
GEGVEDLQP	942.55	291	3.24%
QPMLPK	712.40	297	3.31%
MLRDPFE	906.38	306	3.40%
RDRSPAGP	854.37	344	3.83%
ESVALLVVRPSS	1255.66	346	3.85%
FTVAVGEIQAD	1148.57	348	3.87%
KFSGL	550.35	359	3.99%
LLPIFIILGVF	1243.93	368	4.09%
AGDDAPRAVFPS	1201.58	369	4.10%
INRGVPT	756.40	392	4.34%
ELPDFRD	872.47	392	4.37%
AGNRGSVSEDGDA	1234.58	392	4.37%
RQQGAP	656.33	397	4.42%
TDRLLAG	744.42	413	4.59%

PFGLNGIQKVV	1170.62	414	4.61%
APSVNIV	698.32	429	4.77%
RGEAYTM	826.49	431	4.80%
IGKFFE	739.39	438	4.87%
DQLDDGGKV	945.47	454	5.05%
IMIILLRFL	1130.84	461	5.13%
QMGAAIGK	774.39	482	5.36%
HEFGLQP	826.36	492	5.47%
SVQDFPQG	876.35	537	5.98%
TLGMIAGT	762.40	538	5.98%
QVFNPK	732.34	552	6.15%
QWINPPSEL	1082.56	567	6.32%
LYSAR	608.34	584	6.50%
ATKNPA	600.29	600	6.67%
AEVLSPQ	742.46	615	6.85%
PACIPDPN	883.33	632	7.03%
DFERES	782.36	637	7.09%
TFSDKQVVH	1059.53	648	7.21%
GSLNGSPNL	858.40	649	7.22%
RQPQTRE	913.46	685	7.63%
VTSMIADT	836.47	697	7.76%
TMVPH	599.31	773	8.61%
IQTAAVPGA	826.52	792	8.81%
VRTEWAPL	970.50	807	8.98%
ERAVP	570.35	869	9.67%
RRFVDVQ	918.46	880	9.80%
QVSFAMPK	922.42	908	10.10%
GEGNEDILIV	1057.48	939	10.45%
TIQNVVIQ	914.49	941	10.47%
RLTDAAHST	970.46	965	10.74%
ILLLILIIILITGM	1583.17	992	11.04%
AEFESI	694.39	992	11.04%
VSGIAGPL	712.42	1.01×10^{3}	11.22%
GESLVGLV	772.43	1.01×10^{3}	11.23%
DWRVF	721.34	1.01×10^{3}	11.26%
GAKGSMAGL	790.49	1.01×10^{3}	11.26%
EQQPQQ	756.38	1.04×10^{3}	11.53%
ILIIILILLLI	1261.93	1.06×10^{3}	11.83%
ILLLILIIILI	1261.93	1.06×10^{3}	11.83%
KLIK	500.37	1.09×10^{3}	12.18%
KRISPQ	727.40	1.10×10^{3}	12.19%
GTRTLGAR	830.43	1.13×10^{3}	12.56%
LIIPH	591.38	1.14×10^{3}	12.65%
KAQSSY	708.34	1.15×10^{3}	12.83%

VVPLMGLG	784.46	1.23×10^{3}	13.69%
PKGETIAY	877.47	1.26×10^{3}	14.05%
APAKTPTDILSK	1240.74	1.29×10^{3}	14.36%
YSRAIQ	736.36	1.30×10^{3}	14.45%
DVVGLGIA	742.40	1.37×10^{3}	15.30%
GGSGPPPP	664.35	1.40×10^{3}	15.57%
TPMQLAAAI	914.50	1.44×10^{3}	16.01%
DASVILK	744.40	1.45×10^{3}	16.11%
EVNDNPNL	914.50	1.45×10^{3}	16.15%
RIVPSGT	728.42	1.54×10^{3}	17.18%
DHRFGAD	816.37	1.58×10^{3}	17.57%
EDNAGVIVNPK	1155.64	1.60×10^{3}	17.84%
SEGGLLK	702.36	1.62×10^{3}	18.00%
ISRNIE	730.40	1.65×10^{3}	18.37%
LLIPH	591.37	1.65×10^{3}	18.39%
AEQMLDAAA	918.44	1.74×10^{3}	19.39%
LTYIFV	754.46	1.79×10^{3}	19.90%
IIILILLL	922.68	1.80×10^{3}	20.07%
IILILLLI	922.68	1.80×10^{3}	20.07%
ILIIILIL	922.68	1.80×10^{3}	20.07%
LIIILILL	922.68	1.80×10^{3}	20.07%
LLLLLLLI	922.68	1.80×10^{3}	20.07%
LILIIILI	922.68	1.80×10^{3}	20.07%
LLLLLIIL	922.68	1.80×10^{3}	20.07%
LIILLLLL	922.68	1.80×10^{3}	20.07%
LLLLLLLL	922.68	1.80×10^{3}	20.07%
LLILIIIL	922.68	1.80×10^{3}	20.07%
ILLLILII	922.68	1.80×10^{3}	20.07%
LLLILIII	922.68	1.80×10^{3}	20.07%
ILLLLLLL	922.68	1.80×10^{3}	20.07%
PFPPLQPT	895.56	1.82×10^{3}	20.23%
FPPLQPTP	895.56	1.82×10^{3}	20.23%
VGFGDL	606.32	1.82×10^{3}	20.27%
GAVVTSPPK	854.40	1.85×10^{3}	20.54%
GENALMLAVWGS	1262.64	1.85×10^{3}	20.58%
ADGGKQNAEHS	1112.57	1.86×10^{3}	20.67%
ILIIILILLL	1148.85	1.97×10^{3}	21.93%
LIIILILLLI	1148.85	1.97×10^{3}	21.93%
ILLLILIIIL	1148.85	1.98×10^{3}	22.04%
LLLILIIILI	1148.85	1.98×10^{3}	22.04%
THGY	476.19	2.01×10^{3}	22.37%
ANNDNRSR	1003.46	2.07×10^{3}	23.06%
TDRALELA	887.50	2.09×10^{3}	23.29%
LEEGVTLP	856.51	2.12×10^{3}	23.60%

KREPKLE	898.42	2.20×10^{3}	24.45%
ENQPGIEI	898.42	2.20×10^{3}	24.45%
AMGAELTRIIA	1144.66	2.35×10^{3}	26.19%
LNKAPSPQ	854.38	2.36×10^{3}	26.23%
IIILILLLI	1035.77	2.38×10^{3}	26.51%
ILIIILILL	1035.77	2.38×10^{3}	26.51%
LIIILILLL	1035.77	2.38×10^{3}	26.51%
ILLLILIII	1035.77	2.38×10^{3}	26.51%
LLILIIILI	1035.77	2.38×10^{3}	26.51%
LLLILIIIL	1035.77	2.38×10^{3}	26.51%
LLLLLLLLI	1035.77	2.38×10^{3}	26.51%
IIIIIIIII	1035.77	2.38×10^{3}	26.51%
RSAGAAN	645.29	2.42×10^{3}	26.94%
AGREA	502.29	2.70×10^{3}	30.02%
GTGTIAGRPAKS	1114.50	2.72×10^{3}	30.30%
LVPPQES	768.40	2.77×10^{3}	30.87%
HIRLAQ	736.35	2.82×10^{3}	31.35%
AGGGAPGF	648.36	2.87×10^{3}	31.94%
LKASSAT	676.35	2.88×10^{3}	32.09%
NRIE	530.28	2.89×10^{3}	32.22%
NRLE	530.28	2.89×10^{3}	32.22%
VHDLK	610.34	3.00×10^{3}	33.38%
LAHFR	642.36	3.00×10^{3}	33.43%
TEKVLK	716.37	3.07×10^{3}	34.12%
PLCDDIMFI	1123.47	3.38×10^{3}	37.57%
GAIFLTR	776.45	3.49×10^{3}	38.79%
SVKAKP	628.40	3.61×10^{3}	40.16%
SILDTN	661.33	3.62×10^{3}	40.28%
VMRDSY	769.29	3.75×10^{3}	41.72%
RRFENGE	907.40	3.80×10^{3}	42.33%
DLFLDE	750.37	3.99×10^{3}	44.37%
ELGAIP	598.38	4.07×10^{3}	45.26%
ARAAAIA	642.37	4.22×10^{3}	46.92%
LAGNKRETI	1000.48	4.34×10^{3}	48.29%
GAMILGAL	744.43	4.46×10^{3}	49.63%
AISRP	542.31	4.63×10^{3}	51.48%
ALSPR	542.31	4.63×10^{3}	51.48%
VNNNPV	656.35	4.82×10^{3}	53.68%
QEQLR	672.39	4.99×10^{3}	55.55%
VIHPN	578.32	5.01×10^{3}	55.76%
VLKVPLT	768.44	5.12×10^{3}	57.02%
TLYIPR	761.41	5.13×10^{3}	57.14%
TEDDGVSY	884.31	5.17×10^{3}	57.51%
VPRSGT	615.34	5.20×10^{3}	57.86%

GVDYR	608.30	5.63×10^{3}	62.66%
LAGDGPS	615.32	5.64×10^{3}	62.82%
RDYR	608.30	5.89×10^{3}	65.53%
ARQAAI	628.35	5.91×10^{3}	65.83%
KSRAGAH	725.36	6.13×10^{3}	68.27%
ATKLPS	615.33	7.09×10^{3}	78.96%
GAVMALR	716.39	7.26×10^{3}	80.85%
GHVR	467.26	7.34×10^{3}	81.67%
KWSRVQ	802.43	7.75×10^{3}	86.22%
NEGGPSLPN	883.33	7.79×10^{3}	86.67%
LEGFGRSK	892.45	7.84×10^{3}	87.30%
WIENVVNGL	1043.53	9.00×10^{3}	100.22%
VLDGR	558.31	9.88×10^{3}	109.92%
VNLIPH	692.42	1.08×10^{4}	119.90%
ASPRAP	597.33	1.15×10^{4}	128.10%
LVPPQE	681.37	1.18×10^{4}	131.28%
NVNYKEY	929.51	1.27×10^{4}	141.10%
NIARLA	656.36	1.33×10^{4}	148.58%
DFEFLI	782.36	1.71×10^{4}	190.55%
PAAGAGHQ	707.37	1.72×10^{4}	191.81%
SRTQKEGG	861.43	1.80×10^{4}	200.54%
KMRKLGV	830.45	1.85×10^{4}	206.25%
ASESPST	677.36	1.95×10^{4}	217.52%
LSRMPR	758.37	2.05×10^{4}	227.88%
GADNPMQ	731.41	2.10×10^{4}	233.27%
EGKLVGK	729.38	2.32×10^{4}	257.68%
GQKGVLK	729.38	2.32×10^{4}	257.68%
ADKRLK	729.38	2.32×10^{4}	257.68%
VMRGLD	689.36	2.38×10^{4}	265.40%
FVSF	498.26	2.59×10^{4}	288.81%
VLSPQ	542.34	6.40×10^{4}	712.11%
VISPK	542.34	6.40×10^{4}	712.11%
MVFVCV	754.44	9.86×10^{4}	1097.91%

Supplementary Table 3 Analysis of molecular weight of peptides from *Engraulis japonicus* and *Glycine max*

	Mw	Mn	dispersion coefficient
Ti	264.15	75.4717	3.5
Da	413.124	69.0608	5.98